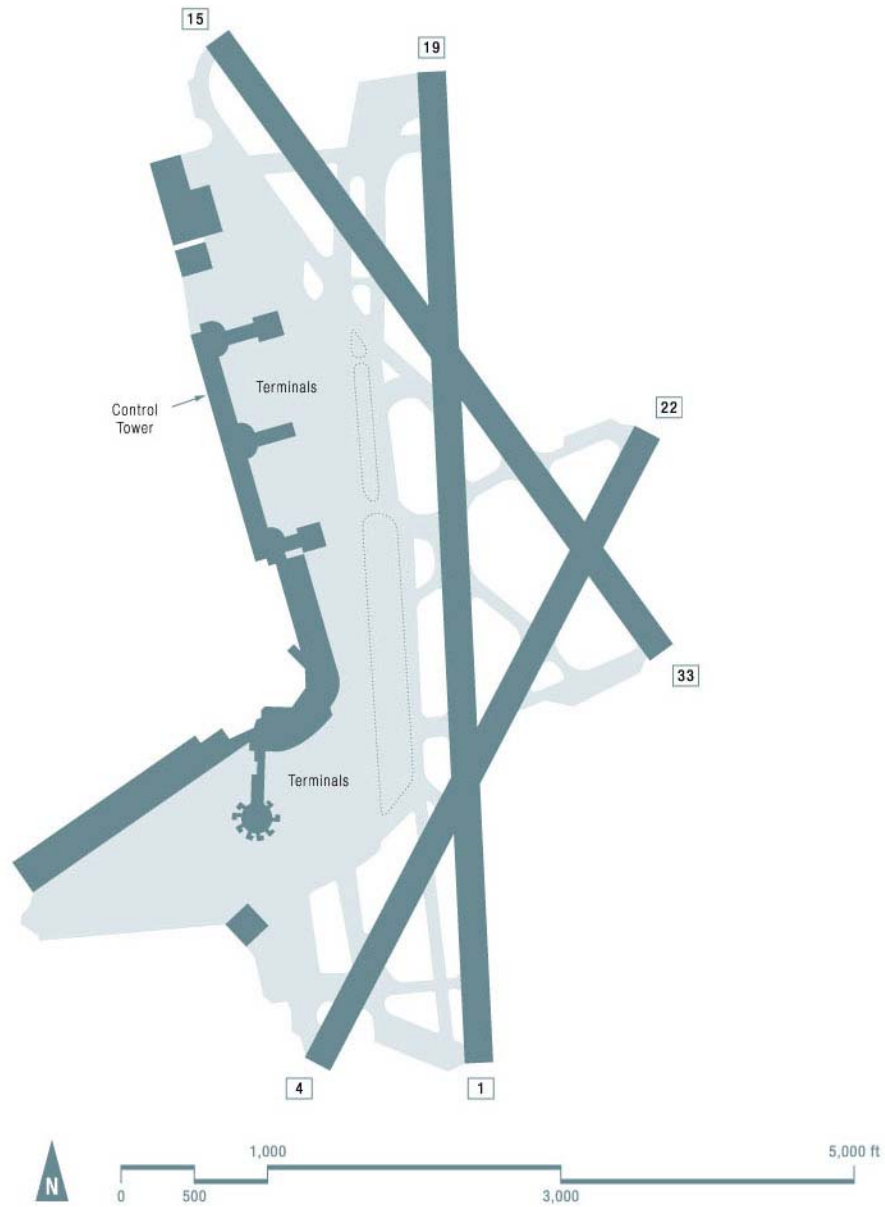


WASHINGTON – Ronald Reagan Washington National (DCA)



WASHINGTON – Ronald Reagan Washington National Airport (DCA)

Benchmark Results

- The capacity benchmark for Ronald Reagan Washington National Airport today is 72-87 flights per hour (arrivals and departures) in Optimum weather, when visual approaches can be conducted.
- The benchmark rate decreases to 60-84 flights per hour in Marginal conditions, and to 48-70 flights per hour in IFR conditions, for the most commonly used runway configuration in these conditions. Throughput may be less when ceiling and visibility are low, or if adverse winds force the use of other runway configurations.
- These benchmarks represent balanced operations with equal numbers of arrivals and departures per hour. Greater total throughput may be possible during arrival or departure peaks.
- DCA has several unique operational characteristics, including visual approaches from the north that follow the Potomac River, a Prohibited Area near the departure end of Runway 01, and stringent security requirements since 11 September 2001. The calculated capacity values for DCA may not reflect all the effects of these characteristics on operation rates.
- A planned improvement, CEFR, will allow visual separation by suitably equipped aircraft in Marginal conditions. However, CEFR is not expected to have a significant effect on the benchmark rates at DCA.
- The following charts compare actual hourly traffic with the calculated capacity curves for DCA. A few points lie outside the capacity curves. There are many possible reasons why this may occur without affecting operational safety. Efficient aircraft sequencing or above-average pilot and controller performance can contribute to higher throughputs. Also, actual weather conditions during the hour may have been better than the hourly readings in the database, allowing more efficient ATC procedures than were modeled.

These values were calculated for the Capacity Benchmarking task and should not be used for other purposes, particularly if more detailed analyses have been performed for the airport or for the individual programs.

The list of Planned Improvements and their expected effects on capacity does not imply FAA commitment to or approval of any item on the list.

WASHINGTON – Ronald Reagan Washington National Airport (DCA)

<i>Weather</i>	<i>Scenario</i>	<i>Configuration</i>	<i>Procedures</i>	<i>Benchmark Rate (per hour)</i>
Optimum Rate Ceiling and visibility above minima for visual approaches (3000 ft ceiling and 4 mi visibility) <i>Occurrence: 86%</i>	Today	Arrivals on Runways 19, 15, 22 Departures on 19, 15 <i>Frequency of Use: 42% in Optimum conditions</i>	Visual approaches, visual separation	72-87
	New Runway	N/A		N/A
	Planned improvements (2013)	Same		87
Marginal Rate Below visual approach minima but better than instrument conditions <i>Occurrence: 8%</i>	Today	Arrivals on Runway 01 Departures on 01, 04, 33 <i>Frequency of Use: 30% in Marginal conditions</i>	Circling approaches, visual separation	60-84
	New Runway	N/A		N/A
	Planned improvements (2013)	Same		84
IFR Rate Instrument conditions (ceiling < 1000 ft or visibility < 3.0 miles) <i>Occurrence: 6%</i>	Today	Arrivals on Runway 01 Departures on 01, 04, 33 <i>Frequency of Use: 40% in IFR conditions</i>	Instrument approaches, radar separation	48-70
	New Runway	N/A		N/A
	Planned improvements (2013)	Same		70

NOTE: Data on frequency of occurrence of weather and runway configuration usage is based on FAA ASPM data for January 2000 to July 2002 (excluding 11-14 September 2001), 7 AM to 10 PM local time.

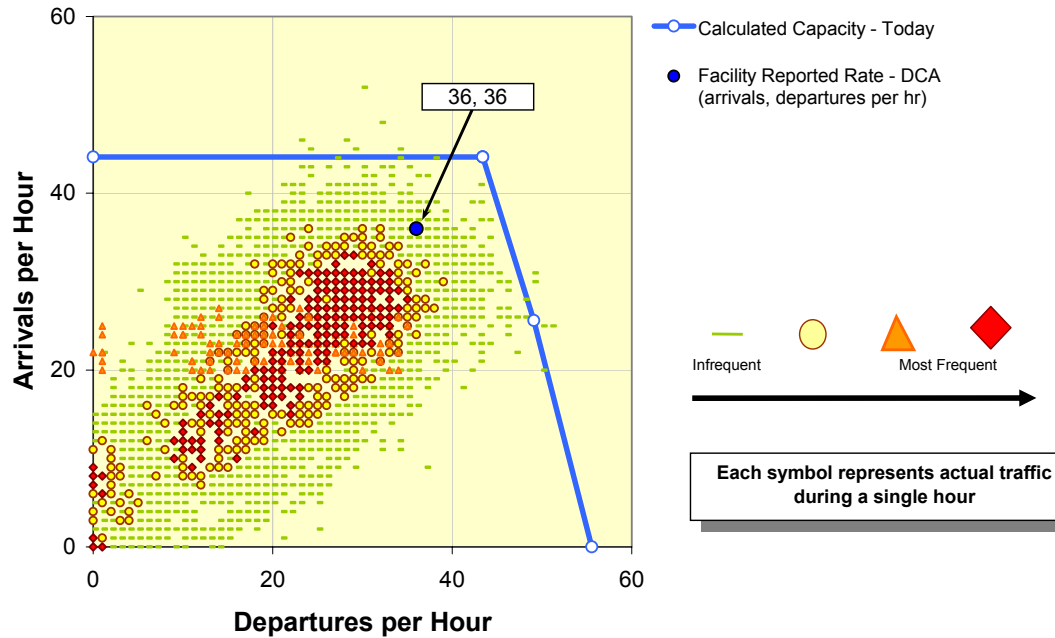
Other Planned Improvements at DCA include:

- CEFR, for reduced in-trail separations between arrivals in Marginal conditions. However, CEFR does not affect the benchmark rate at DCA due to the type of arrival operations performed.

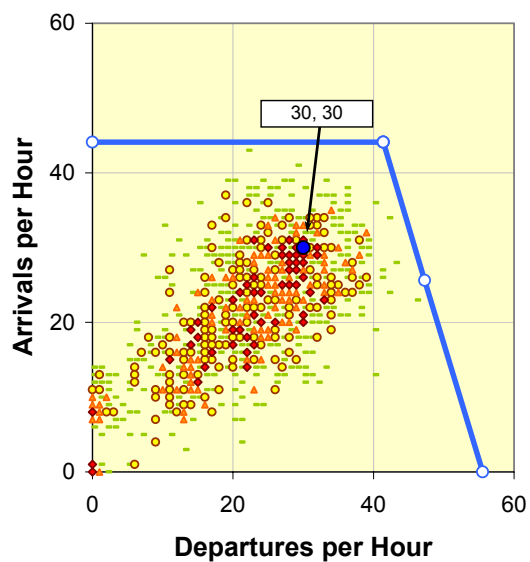
Additional information on this improvement may be found in the Introduction and Overview of this report, under “Assumptions.”

Calculated Capacity (Today) and Actual Throughput

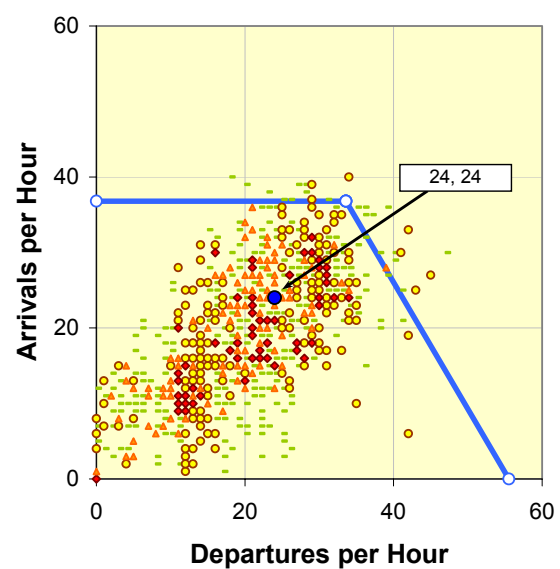
Optimum Rate



Marginal Rate



IFR Rate



Hourly traffic data was obtained from the FAA ASPM database for January 2000 to July 2002 (excluding 11-14 September 2001), 7 AM to 10 PM local time. Facility reported rates were provided by ATC personnel at DCA.